Montana Department of Natural Resources and Conservation
Water Resources Division
Water Rights Bureau

ENVIRONMENTAL ASSESSMENT
For Routine Actions with Limited Environmental Impact

Part I. Proposed Action Description

1. Applicant/Contact name and address:

   The Children's Revocable Trust
   Edwin L. Johnson Trustee
   80 Mol Heron Creek Rd
   Gardiner, MT 59030-9334

2. Type of action: APPLICATION FOR BENEFICIAL WATER USE PERMIT NO. 43B 30107208. The Applicant has installed a well and proposes to appropriate up to 35 gallons per minute (GPM) and up to 2.15 acre-feet (AF) per year of water between January 1 and December 31 within the Yellowstone Controlled Groundwater Area (YCGA). Water will be diverted for domestic use and lawn and garden irrigation.

3. Water source name: GROUNDWATER. Well is located approximately 160 feet from Mol Heron Creek, a tributary to the Yellowstone River.

4. Location affected by project: SW¼NE¼NE¼NE¼, SECTION 35, T8S, R7E, PARK COUNTY. The well is located on Lot A-1, Certificate of Survey 1617, private property owned by the Applicant in a rural area near the Yellowstone River. The property's physical address is 80 Mol Heron Creek Road, Gardiner, MT 59030. (See Figure 1 for a map on the next page.)

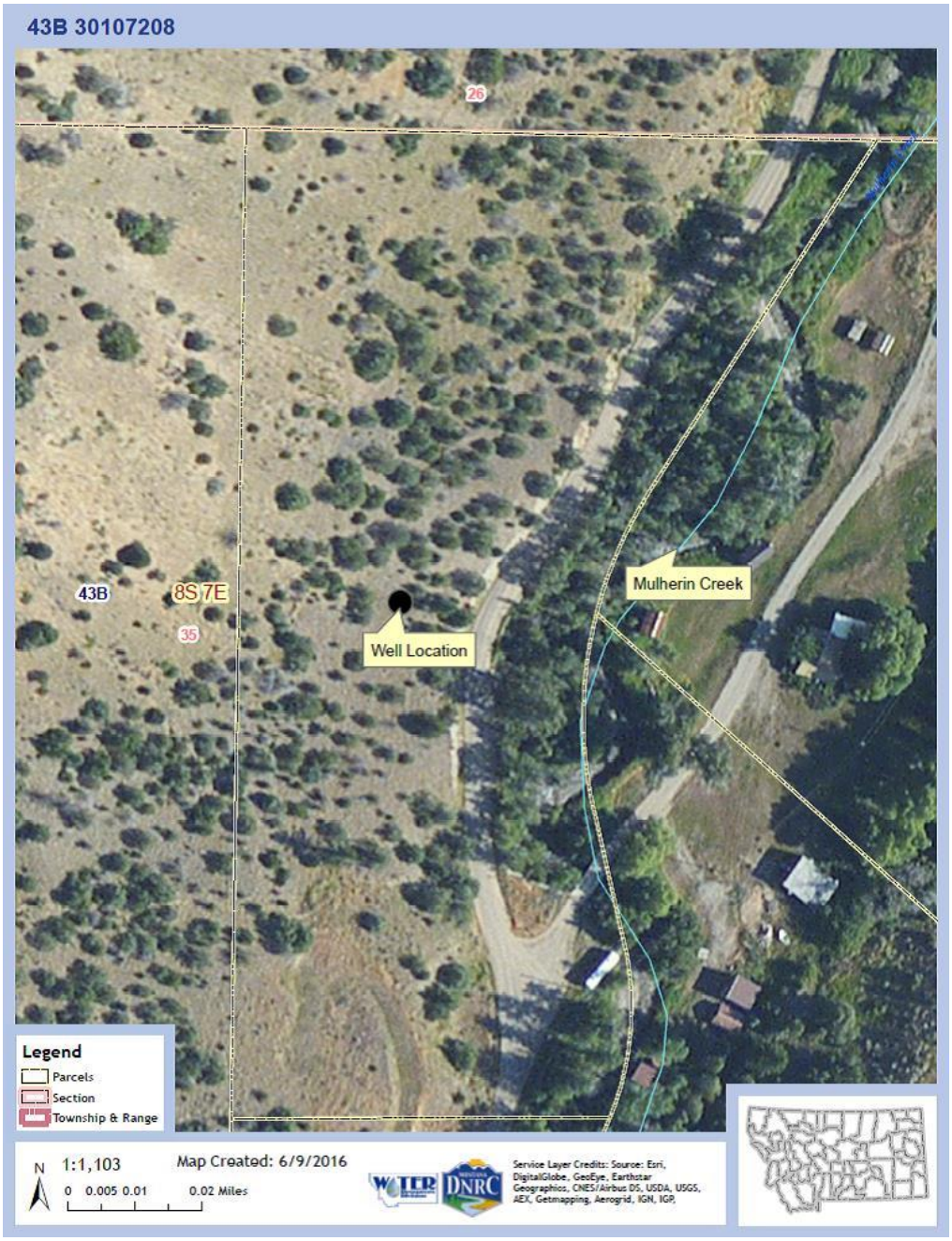

Figure 1: Map of location affected by project.

Note: USGS labels the nearest stream as "Mulherin Creek," however, the existing water rights on the source list a source name as "Mol Heron Creek." To promote consistency in the water right records, this stream will be referred to as "Mol Heron Creek."

5. Narrative summary of the proposed project, purpose, action to be taken, and benefits: The Applicant proposes to pump 35 GPM not to exceed 2.15 AF per year of water for domestic and lawn and garden purposes. Domestic use totals 1 AF year-round, and lawn and garden use totals 1.15 AF for use on 0.46 acres between April 1 and October 31 of each year. The water from this well measured 52 degrees Fahrenheit at the wellhead. The water had a specific conductance of 3010 microhms.

The National Park Service has received notice of this application and no objections have been filed.

6. Agencies consulted during preparation of the Environmental Assessment:
   - Montana Department of Fish, Wildlife & Parks (DFWP) – Montana Fisheries Information System (MFISH):
     http://fwp.mt.gov/fishing/mFish/
   - Montana Department of Environmental Quality (DEQ) – Clean Water Act Information Center (CWAIC):
     http://deq.mt.gov/wqinfo/CWAIC/default.mcpx
   - Montana National Heritage Program (MTNHP) – Species of Concern:
     http://mtnhp.org/SpeciesOfConcern
   - U.S. Fish & Wildlife Service (USFWS) – National Wetlands Inventory Wetlands Mapper:
     http://www.fws.gov/wetlands/Data/Mapper.html
   - National Resources Conservation Service (NRCS) – Soil Survey:
     http://websoilsurvey.sc.egov.usda.gov/App/HomePage.htm

Part II. Environmental Review

1. Environmental Impact Checklist:

PHYSICAL ENVIRONMENT

WATER QUANTITY, QUALITY AND DISTRIBUTION

Water quantity *- Assess whether the source of supply is identified as a chronically or periodically dewatered stream by DFWP. Assess whether the proposed use will worsen the already dewatered condition.*

Determination: No significant impact.

The source of water is groundwater, which is not listed by DFWP. The nearest surface water is Mol Heron Creek, a tributary to the Yellowstone River, which is located approximately 160 ft to the east. As determined by a search of MFISH conducted on September 23, 2016, DFWP does not list this stretch as chronically or periodically dewatered. The well's proposed flow rate of 35 GPM and annual volumetric usage of 2.15 AF will not have a significant impact on nearby surface water flow or water users.

Water quality *- Assess whether the stream is listed as water quality impaired or threatened by DEQ, and whether the proposed project will affect water quality.*

Determination: No impact.

The source of water is groundwater, which is not listed by the Montana Department of Environmental Quality (DEQ). Adjacent surface water quality is not likely to be affected by the proposed well, as Potts Drilling, a licensed driller (license number WWC-512), has constructed

the well in accordance with the rules of the Board of Water Well Contractors. A November 10, 2016, search of the CWAIC website did not identify any threats or impairments for Mol Heron Creek. This well is unlikely to impact the surface water quality.

Groundwater **-** *Assess if the proposed project impacts ground water quality or supply. If this is a groundwater appropriation, assess if it could impact adjacent surface water flows.*

Determination: No significant impact.

The source of water is groundwater. Groundwater quality is not likely to be affected by the proposed well, as Potts Drilling, a licensed driller (license number WWC-512), has constructed the well in accordance with rules of the Board of Water Well Contractors. The proposed 35 GPM and 2.15 AF per year are not likely to have a significant impact on surface water flows, nor are they likely to have a significant impact on nearby water right owners.

The U.S. National Park Service will be notified of this application pursuant to the State of Montana/U.S. National Park Service Compact, Article II, Section B.2.b.ii.3.(b).

DIVERSION WORKS - *Assess whether the means of diversion, construction and operation of the appropriation works of the proposed project will impact any of the following: channel impacts, flow modifications, barriers, riparian areas, dams, well construction.*

Determination: No significant impact.

Water will be diverted using a well with a pump, and use will be measured using a ¾-inch meter supplied by the Department. Potts Drilling, a licensed driller (license number WWC-512), has constructed the well in accordance with rules of the Board of Water Well Contractors. No significant impacts to existing resources have been identified.

UNIQUE, ENDANGERED, FRAGILE OR LIMITED ENVIRONMENTAL RESOURCES

Endangered and threatened species **-** *Assess whether the proposed project will impact any threatened or endangered fish, wildlife, plants or aquatic species or any "species of special concern," or create a barrier to the migration or movement of fish or wildlife. For groundwater, assess whether the proposed project, including impacts on adjacent surface flows, would impact any threatened or endangered species or "species of special concern."*

Determination: No significant impact.

A search of the MTNHP Species of Concern website conducted on October 21, 2016, returned the following results.

- Eleven (11) animal Species of Concern: Bison, Wolverine, Canada Lynx, Grizzly Bear, Golden Eagle, Evening Grosbeak, Cassin's Finch, Clark's Nutcracker, Green-Tailed Towhee, Brewer's Sparrow, and Yellowstone Cutthroat Trout.
- Zero (0) animal Potential Species of Concern.
- One (1) animal Special Status Species: Bald Eagle.

- Zero (0) plant Species of Special Concern.
- Zero (0) plant Potential Species of Concern or plant Special Status Species.

As this proposed application is to divert water from a well located on private property, no significant impacts will occur to threatened, endangered, or special concern species. The pumping of groundwater will not decrease surface water flows to significantly impact any of these species.

Wetlands - *Consult and assess whether the apparent wetland is a functional wetland (according to COE definitions), and whether the wetland resource would be impacted.*

Determination: Not applicable.

According to a September 27, 2016, search of the USFWS Wetlands Mapper, no wetlands exist in the area. No wetlands are involved in the project.

Ponds - *For ponds, consult and assess whether existing wildlife, waterfowl, or fisheries resources would be impacted.*

Determination: Not applicable.

No ponds are involved in the project.

GEOLOGY/SOIL QUALITY, STABILITY AND MOISTURE - *Assess whether there will be degradation of soil quality, alteration of soil stability, or moisture content. Assess whether the soils are heavy in salts that could cause saline seep.*

Determination: No significant impact.

This well has been constructed by Potts Drilling, a licensed driller, in accordance with rules of the Board of Water Well Contractors, so there should not be significant impacts on nearby soil quality. Use of water will occur in a manner consistent with locally accepted, historic practices and will not significantly impact soil quality. A September 27, 2016, search of the NRCS Soil Survey website did not identify any saline seeps in the area.

VEGETATION COVER, QUANTITY AND QUALITY/NOXIOUS WEEDS - *Assess impacts to existing vegetative cover. Assess whether the proposed project would result in the establishment or spread of noxious weeds.*

Determination: No significant impact.

This well has been constructed by Red Tiger Drilling, a licensed driller (license number WWC-598), in accordance with rules of the Board of Water Well Contractors, so there should not be significant impacts on nearby streambanks and vegetative cover. A small area was disturbed by drilling the well, but this should have no significant impact on the surrounding area's vegetative cover and neither should it allow the establishment of noxious weeds. Under Montana law, owners are responsible for noxious weed control on their property.

AIR QUALITY - *Assess whether there will be a deterioration of air quality or adverse effects on vegetation due to increased air pollutants.*

Determination: No impact.

No deterioration of air quality will result from the drilling of this well or diversion of water from it.

HISTORICAL AND ARCHEOLOGICAL SITES - *Assess whether there will be degradation of unique archeological or historical sites in the vicinity of the proposed project if it is on State or Federal Lands. If it is not on State or Federal Lands simply state NA-project not located on State or Federal Lands.*

Determination: Not applicable.

The project is not located on State or Federal Lands. Further, the Applicant made no mention of significant historical or archeological sites on the property.

DEMANDS ON ENVIRONMENTAL RESOURCES OF LAND, WATER, AND ENERGY - *Assess any other impacts on environmental resources of land, water and energy not already addressed.*

Determination: No impact.

No other demands on environmental resources of land, water, and energy are anticipated.

HUMAN ENVIRONMENT

LOCALLY ADOPTED ENVIRONMENTAL PLANS AND GOALS - *Assess whether the proposed project is inconsistent with any locally adopted environmental plans and goals.*

Determination: No significant impact.

Drilling wells for water supply and using water for domestic and lawn and garden irrigation uses are locally accepted practices within the state of Montana.

ACCESS TO AND QUALITY OF RECREATIONAL AND WILDERNESS ACTIVITIES - *Assess whether the proposed project will impact access to or the quality of recreational and wilderness activities.*

Determination: No significant impact.

The proposed project is located on private property in a rural/agricultural neighborhood and will not impact access to or the quality of recreational and wilderness activities.

HUMAN HEALTH - *Assess whether the proposed project impacts on human health.*

Determination: No significant impact.
The water will be used to supply one home for domestic purposes. A March 2011 DEQ Fact Sheet entitled "Individual Drinking Water Wells – Water Quality Monitoring & Treatment" notes that water quality from individual drinking water wells is monitored only by the owner and is "generally not subject to any drinking water standards." The Applicant maintains sole responsibility for testing and treatment of water for any and all domestic purposes. Pumping groundwater for landscape irrigation will not impact human health.

PRIVATE PROPERTY - *Assess whether there are any government regulatory impacts on private property rights.*
*Yes___ No_**X**_ If yes, analyze any alternatives considered that could reduce, minimize, or eliminate the regulation of private property rights*.

Determination: The project does not impact government regulations on private property rights.

OTHER HUMAN ENVIRONMENTAL ISSUES - *For routine actions of limited environmental impact, the following may be addressed in a checklist fashion.*

Impacts on:

(a) *Cultural uniqueness and diversity?* No impacts identified.

(b) *Local and state tax base and tax revenues?* No significant impacts identified.

(c) *Existing land uses?* No significant impacts identified.

(d) *Quantity and distribution of employment?* No impacts identified.

(e) *Distribution and density of population and housing?* No significant impacts identified.

(f) *Demands for government services?* No significant impacts identified.

(g) *Industrial and commercial activity?* No impacts identified.

(h) *Utilities?* No significant impacts identified.

(i) *Transportation?* No impacts identified.

(j) *Safety?* No impacts identified.

(k) *Other appropriate social and economic circumstances?* No impacts identified.

2. *Secondary and cumulative impacts on the physical environment and human population:*

Secondary Impacts: No secondary impacts have been identified.

Cumulative Impacts: No cumulative impacts have been identified.

3. ***Describe any mitigation/stipulation measures:*** There are no mitigation or stipulation measures anticipated at this time.

4. ***Description and analysis of reasonable alternatives to the proposed action, including the no action alternative, if an alternative is reasonably available and prudent to consider:*** If the Applicant is not allowed to drill a well and divert water for domestic or lawn and garden purposes, they may not be able to supply their house with water or irrigate the property. Since the property is located in a rural region, they cannot connect to a municipal system, but they may be able to haul water in. The no-action alternative would be to not drill the well or divert the water.

PART III. Conclusion

1. ***Preferred Alternative:*** The preferred alternative is to obtain a water right permit to use the drilled well.

2 ***Comments and Responses:*** None at this time.

3. ***Finding:***
*Yes___ No_**X**_ Based on the significance criteria evaluated in this EA, is an EIS required?*

If an EIS is not required, explain why the EA is the appropriate level of analysis for this proposed action: The EA is the appropriate level of analysis because the proposed project is to drill a small groundwater well in the YCGA for domestic use and lawn and garden irrigation, which are locally accepted practices, and no significant impacts are anticipated. None of the identified impacts for any of the alternatives is significant as defined in ARM 36.2.524.

Name of person(s) responsible for preparation of EA:

Name: Brant Lumpkin
Title: Water Resource Specialist
Date: September 27, 2016